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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,962	08/13/2001	Shamim A. Alpha	27252.4	8752

7590 08/10/2004

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EXAMINER	
VEILLARD, JACQUES	
ART UNIT	**PAPER NUMBER**
2175	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,962	ALPHA, SHAMIM A.	
	Examiner	Art Unit	
	Jacques Veillard	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8 and 10-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15-26,30 and 31* is/are allowed.

6)☒ Claim(s) *2,3,5-8,10,14 and 27-29* is/are rejected.

7)☒ Claim(s) *4, 11-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the Applicant's communication filed on 6/16/2004.

2. Claims 2, 6, 8, 10, 14, have been amended, claims 27-31 have been added and claims 1 and 9 canceled. Therefore, claims 2-8, 10-31 are pending and presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 2-8, 10-14 filed on 6/16/2004 have been considered but are moot in view of the new ground(s) of rejection. The Final rejection mailed on April 1, 2004 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Page (U. S. Pat. No. 6,285,999).

It is respectfully noted that the examiner's indication of allowability regarding claim 8 (dependent of independent claim 1) and claim 14 (Dependent of independent claim 9) in the Final office action (Now amended as independent claims 8 and 14), has been withdrawn in view of the newly found art. According this action is Non-Final, since said newly found art is specifically applied only to the limitations of claim 8 and claim 14, which were previously indicated as allowable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 3, 5-8, 10, 14, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti et al. (U. S. Pat. No. 6,418,433 and hereinafter Chakrabarti) and Page (U. S. Page 6,285,999).

As per claims 8 and 14, Page teaches "a method for node ranking in a link database which can determining a relevance rank for each of a plurality of pages identified by a search query" by providing a method which is particularly useful in enhancing performance of search engine results for hypermedia databases (See Page's Title and Abstract). In particular, Page teaches the claimed limitations of "identifying a candidate set of pages in response to the search query" (See Page's col.2, lines 1-9, and col.8, lines 21-47); "determining a content-based relevance rank for each of the pages based on a content of each page" (See Page's col.2, line 13-19, lines 39-67). It is noted, however, Page does not specifically teaches the claimed limitations of: "adjusting the content-based relevance rank for a selected page from the plurality of pages based on a link structure of the pages including link rank values from in-coming links, where the link analysis rank being determined from distributed values of content-based relevance from one or more pages that point to the selected page".

On the other hand, Charkrabarti, in the same field of endeavor, teaches a Web crawler method learns to recognize Web pages that relevant to the interest of one or more users includes the claimed limitations of: adjusting the content-based relevance rank for a selected page from the plurality of pages based on a link structure of the pages including link rank values from in-coming links (See Chakrabarti's Fig.2, component 112-118, col.6, lines 16-35, and col.8, lines 35-41), where the link analysis rank being determined from distributed values of content-based

relevance from one or more pages that point to the selected page (See Chakrabarti's col.7, lines 3-41).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method for node ranking in a link database of Page by incorporating the inlinks and outlinks mechanism to adjust the relevant rank in link structure as taught by Chakrabarti. The motivation being to have enhanced the method of Page by allowing it to adjust the content-based relevance rank of a page more efficiently by determine the relevance priority of the pages

As per claims 28 and 29, the claims have substantially the same limitations as claims 8 and 8 above.. These limitations have already been addressed in the rejection of claims 8 and 14. Therefore, they are rejected on similar grounds corresponding to the arguments given to the rejected claims 8 and 14 above.

As per claims 2 and 6, the combination of Chakrabarti and Page, as modified, teaches the claimed limitations , wherein the content-based relevance rank for each page is determined from a probability value that a user will be on the page in relation to other pages of identified pages, and a staying probability that user will stay on the page (See Page's Abstract, and col.5, lines 25-35).

As per claim 3, the combination of Chakrabarti and Page, as modified, teaches the claimed limitations, further including determining the link rank value for each outgoing link from an associated page based on a probability of leaving the page (See Page's col.3, lines 10-17).

As per claims 5 and 7, the combination of Chakrabarti and Page, as modified, teaches the claimed limitations, wherein the adjusting the relevance rank step includes combining the relevance rank of a page with the link rank value of all in-coming links to the page (See Chakrabarti's col.6, lines 16-25, and col.11, lines 6-16).

As per claim 10, the combination of Chakrabarti and Page, as modified, teaches the claimed limitations, further including link structure logic for obtaining a link structure of the candidate set of pages to determine in-coming and out-going page links (See Chakrabarti's col.16-34, col.8, lines 12-30 and col.10, lines 35-43).

As per claim 27, the combination of Chakrabarti and Page, as modified, teaches the claimed limitations, where the plurality of page are the candidate set of pages (See Chakrabarti's col.5, lines 22-28).

Allowable Subject Matter

1. Claims 4 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. Claims 15-26, 30 and 31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art taken alone or in combination fails to teach or suggest: a method for determining the

link rank value step includes distributing the probability of leaving the associated page to all out-going links of the associated page weighted by the content-based relevance rank of a page referenced by the out-going link as recited in claim 4.

A system including a probability logic for determining a staying probability for each page being a probability that a user will stay on a given page, and for determining a leaving probability for each page being a probability that a user will leave a given page as recited in claim 11..

A system where the link analysis rank for an out-going page link from a selected page represents a probability that a user will follow the out-going page link from the selected page as recited in claim 12, and

A system wherein the link analysis logic further includes logic for distributing the leaving probability for the selected page to the out-going page links based on a ratio of the content-based relevance rank of child pages referred to by the out-going page links as recited in claim 13.

3. Regarding independent claims 15 , 26, and 31 the prior art taken alone or in combination fails to teach or suggest a method or system wherein the link ranking for a selected page representing a probability of leaving the selected page by the out-going link; and a relevance rank adjuster for determining and adjusting a relevance rank of a page by combining the content relevance rank with the link rankings associated to in-coming links for the page in combination with the other limitations of the claims were not disclosed by, would riot have been obvious over, nor would have been fairly suggested by the prior art of record.

The dependent claims, being further limiting to the independent claims, definite and enabled by the specification are also allowed.

4. Regarding independent claims 20 , 25, and 30 the prior art taken alone or in combination fails to teach or suggest a method or system wherein the adjusting includes determining, for each candidate page, a probability of a user being on a page in relation to all candidate pages, the probability of a user being on a page being set as the adjusted content-based relevance rank for that page in combination with the other limitations of the claims were not disclosed by, would riot have been obvious over, nor would have been fairly suggested by the prior art of record.

The dependent claims, being further limiting to the independent claims, definite and enabled by the specification are also allowed.

Other Prior Art Made Of Record

5. Broder et al. U. S. Pat. No. 6,073,135.

Bharat et la. U. S. Pat. No. 6,711,568,

-Rubinstein et al. U. S. Pat. No. 5,913,215.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any response to this action should be mail to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communication intended for entry)

Or:

(703) 746-7240 (for informal of draft communications, please label "PROPOSED" or "DRAFT")

Hand - delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA, Fourth Floor Lobby (Receptionist Telephone No. (703) 305-3900).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (703) 305-7094. The examiner can normally be reached Monday through Friday from 9:30 AM to 4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703) 305-3830. The fax phone number for this group is (703) 308-5403.

C Rones

CHARLES RONES
PRIMARY EXAMINER

J.V

Jacques Veillard
Patent Examiner TC 2100

July 28, 2004